

F. H. FIELD.
Fire-Alarm Register.

No. 161,676.

Patented April 6, 1875.

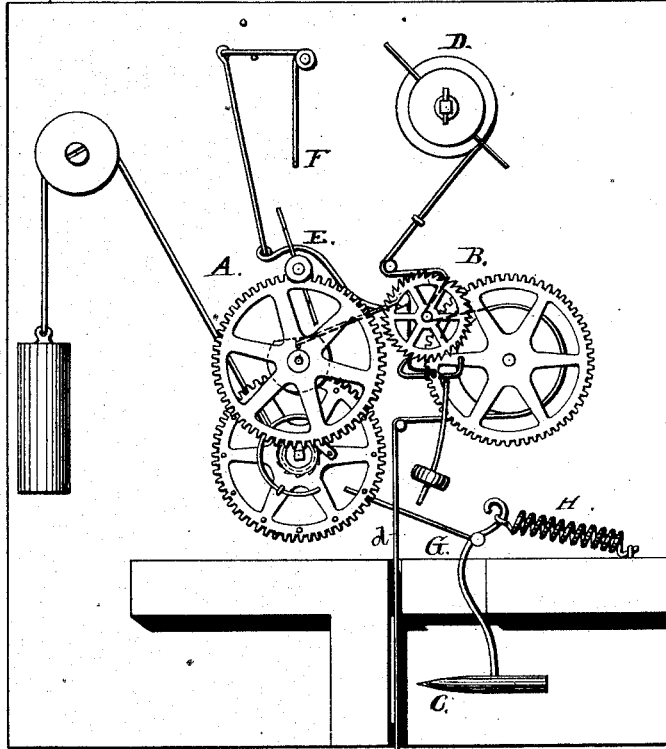


FIG. 1.

WITNESSES.

INVENTOR

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UNITED STATES PATENT OFFICE.

FREDERIC H. FIELD, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN FIRE-ALARM REGISTERS.

Specification forming part of Letters Patent No. **161,676**, dated April 6, 1875; application filed September 26, 1874.

To all whom it may concern:

Be it known that I, FREDERIC H. FIELD, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Fire-Alarm Register; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view of my invention.

My invention is designed as an appendage to the small fire-alarm apparatus used in engine-houses and other indoor places; and consists in the recording mechanism hereinafter described.

The use of the electric fire-alarm which designates the locality of the fire by a certain number of strokes upon a bell at defined intervals renders a most careful counting of such strokes by those in charge of the fire apparatus absolutely necessary. Such strokes, however, occurring, as they do, in the midst of the bustle and haste of preparation preceding the start, are always counted with great difficulty, and often incorrectly.

By my invention, arranged and operating in connection with the fire-alarm bell, the number of the strokes are faithfully recorded at their proper intervals upon a slip of paper, to which reference may be had by the men before starting, thus leaving their minds free during the preparation from the care of counting, and materially lessening the chances of a mistake.

My invention resides in the arrangement and adaptation to the purposes hereinafter set forth of certain well-known mechanical devices, together with such alterations therein and additions thereto as I shall now describe.

The register is set in motion by the back-

ward movement of the hammer preceding each stroke. It consists of two sets of gears, A and B, the former regulating the strokes of the perforating-point C, and the latter the discharge of the paper *d* from the roll D, both sets of gears being controlled in their action by check-levers attached to a shaft, which shaft is rotated by means of the lever E, which is in turn raised by the flying back of the hammer against the arm F.

As soon as the alarm is put into operation, the hammer, in flying back to make each stroke, strikes against the arm F of the lever E, and starts both sets of gears.

The gears A, being properly weighted, move with sufficient power to depress, by means of pivots upon the lower wheel, one arm of the lever G, overcoming the resistance of the spring H, until the arm is released, when the spring H will contract and throw up one arm of the lever G, and the other, to the end of which the perforating-needle is attached, forward, thus perforating the paper at each stroke of the bell.

The gears B, having also been set in motion at the same time, steadily unwind the paper from the roll D, which is carried along by means of a rubber roller, and the weight I at the lower end of the strip, thus constantly presenting a fresh surface to the recording-needle.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of point C, ribbon *d*, gears A B, and levers E G, operating substantially as and for the purpose specified.

FREDERIC H. FIELD.

Witnesses:

WALTER B. VINCENT,
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